
COMMENTARY

Recruitment of Research Volunteers Methods, Interest, and Incentives

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College research departments use students as participants in trials and often receive course credit or other incentives, but sometimes challenges are found in recruiting participants without compensation. This commentary describes methods of recruitment for one study at Palmer Center for Chiropractic Research and comments from two other schools about how they recruit volunteers. (The Journal of Chiropractic Education 21(1): 28-31, 2007)

Key Indexing Terms: chiropractic; human experimentation; patient selection; student

INTRODUCTION

College research departments have often recruited students at their schools to participate in research trials. Commonly, students are perfect candidates for these trials because many are young and asymptomatic. In research trials, student volunteers may be rewarded with course credit or other incentives. A major ethical concern is whether a student is either coerced to be involved in a study or perceives that there will be repercussions for nonparticipation. Some might feel obligated to take part if they believe their grade might otherwise suffer. To guarantee that ethical procedures are followed, methods of recruitment and the process of informed consent for any study carried out on a college campus must be approved by the school's institutional review board (IRB).

Differences have been observed in the motivation between paid and nonpaid research participants. Males have been shown to be more interested in financial compensation, whereas females generally

volunteer for the benefit of the cause.¹ Disputes have arisen about the appropriateness of financial incentives for study recruits.² Most commonly noted is that financial reimbursement could be coercive or serve as an unnecessary stimulus to encourage participation.³ Conversely, there are those who report that there is justification for reimbursing participants for time and expenses.³ Surprisingly, however, there is little standardization for financial reimbursement.³ Recently, Russell et al stated,⁴ "Ethicists and regulatory bodies have raised ethical concerns related to paying subjects to caution against, and even restrict, its widespread use." Financial incentives offer a conflict of interest, according to many researchers, because they can alter the motives of participants and, therefore, the results of a study. A review of literature in 2002 showed, "... financial rewards to be an important motivator among normal healthy volunteers in their decision to participate in clinical trials."⁵ A study published in the *Journal of Medical Ethics* evaluated the attitudes of research volunteers toward the monetary payment or disbursement of other incentives in exchange for their participation in a study. A majority of those surveyed were against financial reimbursement of volunteers for research investigations.⁴ Volunteer recruitment, incentives, and participation in research studies are

important factors when conducting trials, as most studies attempt to assure unbiased results from experiments. However, it is frequently difficult to recruit participants who are not offered an incentive to participate.

In one study on paraspinal muscle spindle sensitivity at Palmer Center for Chiropractic Research,⁶ unforeseen difficulties arose in acquiring the 48 student volunteers needed to complete the project. After recruiting, scheduling, and conducting the investigation, questions arose as to how other chiropractic colleges recruit student volunteers, and what incentives, if any, are given for their efforts. Also of concern was the level of interest in chiropractic research present in the student bodies of other chiropractic schools.

A literature search utilizing Pubmed found several examples of studies using volunteer subjects. When using the search string "research volunteer recruitment methods," 64 results were obtained, with 8 relevant to this discussion. When using the search string "chiropractic college students," however, 17 of the 64 results involved student volunteer subjects, some of which were symptomatic and others asymptomatic. Fifteen articles were found using "student volunteers AND chiropractic" while "chiropractic college students" yielded 3 relevant articles. None of the articles actually discussed the recruitment process or methods of garnering participants. The most relevant discussion was found in Dr. J.Q. Zhang's work at Sherman College of Straight Chiropractic reported in 1996. Dr. Zhang surveyed 70 chiropractic students and found that the majority were interested in research and participating in trials. Reasons for not participating included family responsibilities, school work load, and lack of interest and/or experience. Zhang stated, "The overwhelming concern to the students in terms of participating in research was the additional time requirement."⁷

The purpose of this article is to describe the methods used in recruiting students for our study and some methods used for student recruitment at two other chiropractic colleges.

METHODS OF RECRUITMENT

Two Other US Chiropractic Colleges

Subsequent to completing the above referenced study at Palmer, several other chiropractic college research centers were contacted to ascertain exactly

how other investigators recruit student volunteers, and what incentives, if any, are offered for their participation. After an informal survey, it was apparent that in-class presentations with extra credit incentives were the most effective method of attaining student volunteers for research studies. Typically, what occurs is that after an in-class discussion about a particular study, the presenter asks for volunteers to participate in the investigation. Dr. Jerrilyn Cambron at National University of Health Sciences finds the best results in participation are gained this way. Dr. Cambron utilizes students frequently in studies and rewards them with community credit hours, which are mandatory for all interns. These hours can be gained working in the community or by volunteering in the research department. Dr. Cambron states that many times students are not offered any incentive, but still participate because of interest in the project or in chiropractic research.

Numerous studies completed at Palmer College of Chiropractic West by Dr. Robert Cooperstein utilized college students. Dr. Cooperstein is able to utilize a few minutes of class time to discuss projects in which volunteers are needed; it saves time to be able to tell a group about the study at once, instead of having to make a number of telephone calls to talk about the study to each individual. He sometimes offers extra credit points to those interested in donating their time to a project, as long as every student in the class has equal opportunity to participate. If more students volunteer than are needed for a study, others may earn credit by observing the research or by helping in another way. A student who does not meet the inclusion criteria may earn credit by observing the research or doing an extra credit project. Students who decline to earn credit conducting or observing research must be given an opportunity to earn extra credit alternatively, such as by writing a paper. These criteria allow everyone in the class to earn credit equally, although there are still a few students who decline to earn the points.

Recruitment for Our Study

There were numerous and varied attempts made to enlist student participants for the paraspinal muscle spindle sensitivity study.⁶ As designated by the IRB-approved proposal for this investigation, no compensation, reward, or incentive was offered in exchange for participation in the study. To garner interest in the study, presentations were given in classes and posters were hung around the school. In the earliest

presentations, Dr. Edward Owens simply displayed his contact information, expecting interested students to call the research clinic. There seemed to be interest during the presentation, but there was no follow-up on the part of the students. Participation was minimal after 1 year of recruitment (nine subjects). In the 2nd year of the study, Dr. Owens made presentations in his evidence-based research class (a 9th-trimester course) and in two other classes in the 1st-year curriculum, where he described the study in detail, including its main goals and how it may benefit the profession in the future. A sign-up sheet was circulated, and names of those interested in being contacted for participation were obtained. The presentation was given on 4 different occasions during the course of the investigation, involving 4 different class groups.

In another effort, signs and posters around the school publicized the study and how to volunteer. Sign-up sheets were circulated around several different classrooms throughout the college. Also, a list of student names and mailbox numbers was obtained from the Student Services Department at Palmer, and flyers describing the study were delivered to hundreds of student mailboxes.

Representatives from the Research Center set up a booth outside the student mailroom to discuss the trial with students, faculty, and staff, aiming to recruit participants for the study. Many were screened for eligibility on-the-spot and scheduled to participate. Acquaintances of the research team and Research Center employees who met the eligibility requirements and were interested in participating were also included in the study.

Table 1 shows a breakdown of the volunteer recruitment results for our study. The most effective means were class presentations and the recruitment

booth set up outside the student mailroom. Because of the high traffic flow on a daily basis at this location, students frequently visit the mailroom to keep up with current events. This 1-day event qualified and scheduled 17 student participants, and cultivated student interest in the current efforts of the Palmer Center for Chiropractic Research.

Since there was a deadline to complete the study, the amount of time spent enlisting volunteers with each method was noted (Table 1). The posted signs and flyers seemed productive, but the 8 participants recruited by this method took more than a year to recruit, while other methods were successful in a much shorter time frame.

The most difficult aspect of this investigation was attaining volunteers without offering credit. Many students do not give their time to participate in a volunteer activity without compensation. However, many students were interested in the study once it was explained to them either at the recruitment booth or in the classroom presentation format. Class sizes in the early trimesters have large numbers of students, some larger than 200. Based on the numbers alone, the probability of recruiting students in early trimesters is much higher than in upper trimester classes. These particular students, although highly stressed with 1st-year classes and a multitude of tests and assignments, were generally the most interested and willing to contribute to the study. Based on the number of early-trimester students who participated, it may be effective in the future to target volunteers as early as new student orientation. This will also expose incoming students to the options available for becoming involved in their college's research efforts.

The chiropractic colleges that provided information about their volunteer recruitment processes and

Table 1. Recruitment Efforts, Potential Eligible Participants, and Time Involved in Recruiting for Our Study

Recruitment effort	Number of eligible participants	Time involved
Posters & signs	8	More than 1 year
Class presentations	17	40 minutes
Flyers/sign-up sheets	5	Ongoing (approx. 1 year)
Direct mail	2	4 weeks
Recruitment booth	17	4 hours
Research Center employees	5	n/a
Acquaintances	3	n/a

Note: The number of subjects needed was 48; the total number of participants was 57 due to a change in protocol after year 1.

incentives follow their IRB guidelines and approach the recruitment process with great care. Everyone has a fair chance to be involved in research if they are interested. Financial incentives are not a burden to be dealt with because they are not offered. There seems to be no shortage of interest from students at schools such as Palmer College of Chiropractic West and National University, perhaps because smaller class size fosters interpersonal relationships between students and professors. All students have an equal opportunity to participate and/or receive credit if desired. In the future, if possible, studies at Palmer College of Chiropractic involving student volunteers should offer course credit of some kind in order to ensure an adequate number of participants.

CONCLUSION

The recruitment process for a research study at Palmer College of Chiropractic showed that the most effective methods of attracting student participation were establishing a kiosk outside the student mail-room and distributing a sign-up sheet after a class presentation when many or most of the students were expected to be in attendance. Offering course credit as incentive can be a very efficient and effective method of garnering volunteers, provided everyone has equal opportunity to be involved, and all methods are IRB approved.

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